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1 Safety precautions and Warnings

To prevent personal injury or damage to vehicles and/or the code reader, read this instruction manual first and observe the following safety precautions at a minimum whenever working on a vehicle:

- Always perform automotive testing in a safe environment.
- Wear safety eye protection that meets ANSI standards.
- Keep clothing, hair, hands, tools, test equipment etc. away from all moving hot engine parts.
- Operate the vehicle in a well-ventilated work area. Exhaust gases are poisonous.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while running tests.
- Use extreme caution when working around the ignition coil distributor cap ignition wires and spark plugs. These components create hazardous voltages when the engine is running.
- Put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.
- Keep a fire extinguisher suitable for gasoline/chemical electrical fires nearby.
- Don’t connect or disconnect any test equipment while the ignition is on or the engine is running.
- Keep the code reader dry, clean, free from oil/water or grease. Use a mild detergent on a clean cloth to clean the outside of the code reader, when necessary.

2. Using the code reader
2.1 Tool Description

① OBD II CONNECTOR — Connects the code reader to the vehicle’s Data Link Connector (DLC).
② LCD DISPLAY — Indicates test result
③ Vehicle ID Number — Vehicle identification code
④ UP SCROLL BUTTON — Moves up through menu and submenu items in menu mode. When more than one DTC is retrieved moves up through the current screen to the previous screens for additional DTCs and definitions.
⑤ RETURN BUTTON — Cancels a selection (or action) from a menu or return to the menu. It also used to set up the unit when being pressed and held for at least 3 seconds
⑥ DTC BUTTON — Trouble Codes
⑦ OK BUTTON — Confirms a selection (or action) from a menu. When a DTC’s definition covers more than one screen, it is used to move down to the next screen for additional data.
DOWN UP — DOWN BUTTON — Moves up through menu and submenu items in menu mode. When more than one DTC is retrieved moves up through the current screen to the previous screens for additional DTCS and definitions.

### 2.2 Specification

1. Display: Badit, 128 x 64 pixel display
2. Operating Temperature: 0~60°C (32~140°F)
3. Storage Temperature: -20 ~70°C (-4 ~158°F)
4. External Power: 8.0 to 15.0 Volts provided via vehicle battery
5. Dimensions: Length: 155mm Width: 85mm Height: 25mm
6. 0.198Kg (0.431lb)

### 2.3 Accessories Included

1. User’s Manual—Instructions on tool operations
2. OBD2 cable—Provides power to tool and communicates between tool and vehicle

### 2.4 Navigation Characters

Characters used to help navigate the code reader are:

1. “Δ” Indicates current selection.
2. “Pd”-Identifies a pending DTC when viewing DTCS
3. Identifies the control module number from which the data retrieved

### 2.5 Vehicle Power

The power of the code reader is provided via the vehicle Data Link Connector (DLC). Follow the steps below to turn on the code reader.

1. Connect the OBD II cable to the code reader
2. Find DLC on vehicle
   - A plastic DLC cover may be found for some vehicles and you need to remove it before plugging the OBD2 cable.
3. Plug OBD II cable to the vehicle's DLC.

### 2.6 Vehicle Power

The code reader allows you to make the following adjustments and settings:

1) Language: Selects desired language.
2) Unit of measure: Sets the unit of measure to English or Metric.
3) Contrast adjustment: Adjusts the contrast of the LCD display.

- The Settings of the unit will remain until change to the existing settings is made

To enter the setup menu

From the second startup screen, press UP/DOWN button to enter System Setup menu. Follow the instructions to make adjustments and settings as described in the following setup options.

- The number "x/x" to the upper right corner of the screen indicates total number of items under the menu and sequence of currently selected item.

### Language Setup

- English is the default language.

1) From System Setup menu, use UP/DOWN button to select Language, and press RETURN/OK button.
2) Use UP/DOWN button to select the desired language and RETURN/OK button to save your selection and return to previous menu.

Unit of Measurement
- Metric is the default measurement unit
  1) From System Setup menu, use UP/DOWN button to select Unit of Measure and press RETURN/OK button.
  2) From Unit of Measure menu, use UP/DOWN button to select the desired unit of measurement.
  3) Press RETURN/OK button to save your selection and return to previous menu.

Contrast Adjustment
  1) From System Setup menu, use UP/DOWN button to select Contrast and press UP/DOWN button.
  2) From Contrast menu, use UP/DOWN button to adjust contrast.
  3) Press RETURN/OK button to save your settings and return to previous menu.

Exiting System Setup
  1) Use RETURN/OK button to return to startup menu.
2.7 Vehicle Coverage

The Automat or AT 018 OBD II /EOBD Code Reader is specifically designed to work with all OBD II compliant vehicles, including those equipped with the next-generation protocol—Control Area Network (CAN). It is required by EPA that all 1996 and newer vehicles (cars and light trucks) sold in the United States must be OBD II compliant and this includes all Domestic, Asian and European vehicles.

A small number of 1994 and 1995 model year gasoline vehicles are OBD II compliant. To verify a 1994 or 1995 vehicle is OBD II compliant, check the Vehicle Emissions Control Information (VECI) Label which is located under the hood or by the radiator of most vehicles. If the vehicle is OBD II compliant, the label will designate "OBD II Certified". Additionally, Government regulations mandate that all OBD II compliant vehicles must have a "common" sixteen-pin Data Link Connector (DLC).

For your vehicle to be OBD II compliant it must have a 16-pin DLC (Data Link Connector) under the dash and the Vehicle Emission Control Information Label must state that the vehicle is OBD II compliant.

3. OBD II Diagnostics

When more than one vehicle control module is detected by the scan tool, you will be prompted to select the module where the data may be retrieved. The most often to be selected are the Powertrain Control Module [PCM] and Transmission Control Module [TCM].

CAUTION: Don't connect or disconnect any test equipment with ignition on or engine running.

1) Turn the ignition off.
2) Locate the vehicle’s 16-pin Data Link Connector (DLC).
3) Plug into the OBD II cable to the vehicle’s DLC.
4) Turn the ignition on. Engine can be off or running.
5) Press RETURN/OK button to enter Diagnostic Menu. A sequence of messages displaying the OBD2 protocols will be observed on the display until the vehicle protocol is detected.

If the code reader fails to communicate with the vehicle's ECU (Engine Control Unit), a "LINKING ERROR!" message shows up on the display.

1) Verify that the ignition is ON;
2) Check if the code reader's OBD II connector is connected to the vehicle's DLC;
3) Verify that the vehicle is OBD2 compliant;
4) Turn the ignition off and wait for about 10 seconds. Turn the ignition back on and repeat the procedure from step 5.

If the "LINKING ERROR" message does not go away, then there might be problems for the code reader to communicate with the vehicle. Contact your local distributor or the manufacturer's customer service department for assistance.

6) After the system status is displayed (MIL status, DTC counts Monitor status), wait a few seconds or press any key for Diagnostic Menu to come up.
3.1 Reading Codes

1) Use UP/DOWN button to select Read Codes from Diagnostic Menu and press RETURN/OK button.

If more than one module is detected, you will be prompted to select a module before test.

2) View DTC is and their definitions on screen.

3) If more than one DTC is found, use UP/DOWN button as necessary, until all the codes have been shown up.

4) Press RETURN/OK button to return to previous menu.

3.2 Erasing Codes

CAUTION: Erasing the Diagnostic Trouble Codes may allow the code reader to delete not only the codes from the vehicle’s on-board computer, but also "Freeze Frame" data and manufacturer enhanced data. Further, the I/M Readiness Monitor Status for all vehicle monitors is reset to Not Ready Not Complete status. Do not erase the codes before the system has been checked completely by a technician.

- This function is performed with key on engine of (KOEO). Do not start the engine.
1) If you decide to erase the DTCs, use UP/DOWN button to select Erase Codes from Diagnostics Menu and press RETURN/OK button.

2) A warning message comes up asking for your confirmation.

3) If you want to proceed with erasing the codes, press RETURN/OK button to erase.
   - If the codes are cleared successfully, an "Erase Done!" message shows up.
   - If the codes are not cleared, then an "Erase Failure. Turn Key on with Engine off!" message displays.

4) Wait a few seconds or press any key to return to Diagnostic Menu.
   - Use UP/DOWN button to select a module and press RETURN/OK button.

3.2 Viewing Freeze Frame Data

1) To view freeze frame, use UP/DOWN button to select View Freeze Frame Diagnostic Menu and press RETURN/OK button.

2) Wait a few seconds while the code reader validates the PID MAP.

3) If the retrieved information covers more than one screen, use UP/DOWN button, as necessary, until all data have been shown up.
The number "x/x" to the upper right corner of the screen indicates total number of screens the retrieved freeze frame covers and sequence of currently displayed data. If there is no freeze frame data available an advisory message “No Freeze Frame Data Stored!” shows on the display.

4) Press RETURN/OK to return to Diagnostic Menu.

### 3.4 Retrieving I/M Readiness Status

I/M Readiness function is used to check the operations of the Emission System on OBD2 compliant vehicles. It is an excellent function to use prior to having a vehicle inspected for compliance to a state emissions program. Some latest vehicle models may support two types of I/M Readiness tests:

A. Since DTCs Cleared–indicates status of the monitors since the DTCs are erased.

B. This Drive Cycle–indicates status of monitors since the beginning of the current drive cycle.

An I/M Readiness Status result of "NO" does not necessarily indicate that the vehicle being tested will fail the state I/M inspection. For some states, one or more such monitors may be allowed to be “Not Ready” to pass the emissions inspection.

- “OK”–Indicates that a particular monitor being checked has completed its diagnostic testing.
- “INC”–Indicates that a particular monitor being checked has not completed its diagnostic testing.
- “N/A”–The monitor is not supported on that vehicle.

1) Use UP/DOWN button to select I/M Readiness from Diagnostic Menu and press RETURN/OK.

- If more than one module is detected, you will be prompted to select a module before test.

2) Wait a few seconds while the code reader validates the PID MAP.

3) If the vehicle supports both types of tests, then both types show on the screen for selection.
4) Use UP/DOWN button to view the status of the MIL light ("ON" or "OFF") and the following monitors:

- Misfire monitor -- Misfire monitor
- Fuel System Mon -- Fuel System Monitor
- Comp. Component -- Comprehensive Components Monitor
- EGR -- EGR System Monitor
- Oxygen Sens Mon -- O2 Sensors Monitor
- Catalyst Mon -- Catalyst Monitor
- EVAP System Mon -- Evaporative System Monitor
- Oxygen Sens htr -- O2 Sensor Heater Monitor
- Sec Air System -- Secondary Air Monitor
- Htd Catalyst -- Heated Catalyst Monitor
- A/C Refrig Mon -- A/C system Monitor

5) If the vehicle supports readiness test of "This Drive Cycle", a screen of the following will be displayed:

- The number "x/x" to the upper right corner of the screen indicates total number of screens the retrieved data cover and sequence of currently displayed data.

6) Press UP/DOWN button to return to previous menu.

### 3.5 Viewing Vehicle Information

The Vehicle Info. function enables retrieval of the Vehicle Identification No. (VIN), Calibration ID(s), Calibration Verification Nos. (CVNs) and In-use Performance Tracking on 2000 and newer vehicles that support Mode 9.

1) Use UP/DOWN button to select Vehicle Info. from Diagnostic Menu and press RETURN/OK button.

   - Turn Key on With engine off!

2) Wait a few seconds or press RETURN/OK button to continue.

   - If the vehicle does not support this mode, a "The selected mode is not supported!" message shows on the display.

   - If more than one module is detected, you will be prompted to select a module before test.
• Use UP/DOWN button to select a module, and press RETURN/OK button.

3) Wait a few seconds while the code reader reads vehicle information.

4) From Vehicle Info. menu, use UP/DOWN button to select an available items to view and press OK button.

5) View retrieved vehicle information on the screen.

6) Press RETURN/OK to return to previous menu.
3.7 Waveform display

1) Press "OK" to enter the real-time curve page

2) Press "OK" to view the speed waveform display

3) Press "OK" to enter the calculation load value page.

4) Press OK to enter the engine speed waveform display page

5) Press OK to enter the engine coolant temperature waveform display page.

- The waveform display page can be quickly exited by pressing the back key or the OK button.
3.8 Fault code query

- press “∆” Adjust the next code
- press “▽” Adjust current code

After the code input is completed, press OK to query.

4. Warranty and Service

4.1 Limited One Year Warranty

Our warrants to its customers that this product will be free from all defects in materials and workmanship for a period of one(1)year from the date of the original purchase, subject to the following terms and conditions:

1) The sole responsibility of Our under the Warranty is limited to either the repair or, at the option of Our, replacement of the codereader at no charge with Proof of Purchase. The sales receipt may be used for this purpose.

2) This warranty does not apply to damages caused by improper use, accident, flood, lightning, or if the product was altered or repaired by anyone other than the Manufacturer’s Service Center.

3) Author shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the codereader. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

4) All information in this manual is based on the latest information available at the time of publication and no warranty can be made for its accuracy or completeness. Our reserves the right to make changes at any time without notice.

4.2 Service Procedures

If you have any questions, please contact your local store, Email: cy@cyobd.com.

If it becomes necessary to return the code reader for repair, contact your local distributor for more information.